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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/552,657	04/19/2000	Tomohiro Nakajima	0557-4969-2	2974

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EXAMINER

PHAN, JAMES

ARI UNIT PAPER NUMBER

2872

DATE MAILED: 12/15/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application N .

09/552.657

Applicant(s)

NAKAJIMA, TOMOHIRO

Examiner

James Phan

Art Unit

2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 November 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2, 3, 14-17 and 34-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2, 14-17 and 34-36 is/are rejected.
- 7) ☒ Claim(s) 3 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1) ☐ Certified copies of the priority documents have been received.
2) ☐ Certified copies of the priority documents have been received in Application No. _____.
3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Amendment After Final

The amendment after final filed 11/10/03 has been entered. Newly submitted claim 36 will be grouped with the elected claims.

Election/Restrictions

Claim 34 has been reinstated.

Claim Rejections - 35 USC § 112

Claims 14-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Each of claims 14 and 15 recites an aperture which is incorporated into deflection surfaces of a deflection unit for shaping the light beams to have a given size; each of the claims also recites "the given spot size of the light beams is larger than a size of each of the deflection surfaces" which is vague and indefinite and which appears to be misdescriptive because the "the given spot size of the light beams" cannot be larger than "a size of each of the deflection surfaces" (see Figs. 6A-6B and/or Figs. 5A-5B and the accompanying text of the present application). Also, claims 16-17 are rejected in that they are dependent on the indefinite claims and thus inherit the deficiency above.

Withdrawal of Allowed Claims

The indicated allowability of claims 2, 14-15 is withdrawn in view of the newly discovered reference(s) to Sakuma et al and Suzuki et al. Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 102

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 2, 14-15 (see "Note" below), 34 and 36 are rejected under 35 U.S.C. 102(a) as being anticipated by Suzuki et al.

In re claims 2, 14-15, 34 and 36 Suzuki et al discloses a multibeam scanning apparatus which comprises a light source unit having semiconductor lasers (101a,101b) and coupling lenses (102a,102b) for emitting light beams (A and B) crossed each other at a point; a polygon mirror (104M) having a light beam restriction unit positioned close to the point (note that the periphery of each of the deflection surfaces has been taken as an aperture or restriction unit for shaping the light beams); a scanning lens (105) for forming images on a scanned surface (109); and the spot size of the light beams incident to the polygon mirror is larger than a size of each of the reflection (deflection) surfaces in at least the main scanning direction. See Figs. 19-21 and the accompanying text.

Note that "the given spot size of the light beams is larger than a size of each of the deflection surfaces" recited in each of claims 14 and 15 has been interpreted as --the spot size of the light beams incident to the deflection unit is larger than a size of each of the deflection surfaces--.

Claim 35 is rejected under 35 U.S.C. 102(a) as being anticipated by Sakuma et al.

Sakuma et al discloses a multibeam scanning apparatus which comprises a deflection unit having deflection surfaces (polygonal deflector 4); a light source unit for emitting light beams (c1 and c2) crossed each other on a deflection surface (facet) of the deflection unit (Fig. 6 and column 7, lines 45-48); and a restriction unit provided on each of the deflection surfaces. Note that the periphery of each of the deflection surfaces has been taken as an aperture or restriction unit for shaping the light beams to achieve a desired spot size.

Allowable Subject Matter

Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 16-17 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: the prior art fails to disclose a multibeam scanning apparatus having the structure specified in each of claims 3 and 16-17.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Phan whose telephone number is (703) 308-4810. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on (703) 305-0024. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Phan, J.

Dec. 8, 2003

A handwritten signature in black ink, appearing to read "James Phan", followed by a long horizontal line extending to the right.